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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/696,839

10/30/2003

Sherif Yacoub

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

ELAHEE, MD S

ART UNIT

PAPER NUMBER

2614

NOTIFICATION DATE

DELIVERY MODE

03/12/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/696,839	<b>Applicant(s)</b> YACOUB ET AL.	
	<b>Examiner</b> MD S. ELAHEE	<b>Art Unit</b> 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/30/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on February 27, 2004 was received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

4. Claim 17 recites a computer-usable medium embodying computer program code for commanding a computer to manage telephone calls. Claim language does not comply with the requirements of MPEP 2106.01.I. The “medium” is only recited once in the invention disclosure (Preamble of Claim 17). Since “medium” is not defined in the disclosure, it may encompass a

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variety of media ranging from a piece of paper to a carrier signal. Furthermore, “computer program” or “software” is merely a set of instructions. On the contrary, “memory”, “computer program” and “software” are well defined acceptable terminology in computer programming. Computer program is data structure. Data structures not claimed as embodied in computer-readable or machine-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer or machine. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Claim 17 fails to include practical application that produces either (1) tangible, concrete and useful result or (2) physical transformation. Therefore, since the claimed computer-usable medium does not comprise instructions to cause a processor to perform the calling, presenting, translating, connecting and providing functions of the claim then the Applicant has not complied with 35 U.S.C 101. Since claims 18-20 are dependent claims, these claims are also rejected under 35 U.S.C 101.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-11 and 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrow et al. (U.S. Patent No. 6,990,179) in view of Lau et al. (U.S. Patent No. 6,850,766) further in view of Parolkar et al. (U.S. Patent No. 7,366,285).

Regarding claims 1, 17, 21, with respect to Figures 1-3, Merrow teaches a method for managing telephone calls, comprising:

calling a contact (abstract; col.2, lines 45-48);

Marrow further teaches presenting the contact with a predetermined out-calling dialog (col.2, line 50-col.3, line 40);

However, Marrow does not specifically teach translating the contact's vocal responses to the dialog into textual words using selected interactive voice response algorithms. Lau teaches translating the contact's vocal responses to the dialog into textual words using selected interactive voice response algorithms (col.6, lines 15-28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Marrow to incorporate the feature of translating the contact's vocal responses to the dialog into textual words using selected interactive voice response algorithms in Marrow's invention as taught by Lau. The motivation for the modification is to do so in order to match the response with predetermined responses.

Marrow further does not specifically teach connecting the contact to a human operator after a predetermined portion of the out-calling dialog with the contact is completed. Lau teaches connecting the contact to a human operator after a predetermined portion of the out-calling dialog with the contact is completed (col.6, lines 15-28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Marrow to incorporate the feature of connecting the contact to a human operator after a predetermined portion of the out-calling dialog with the contact is completed in Marrow's invention as taught by Lau. The motivation for the modification is to do so in order to transfer a user to a live operator in case of the user's unacceptable responses.

Marrow in view of Lau further does not specifically teach providing the operator with the textual words. Parolkar teaches providing the operator with the textual words (col.3, lines 17-

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27, 61-67, col.4, lines 1-3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow in view of Lau to incorporate the feature of providing the operator with the textual words in Merrow's invention in view of Lau's invention as taught by Parolkar. The motivation for the modification is to do so in order to send text responses to an agent such that the agent can communicate with the user using text messaging technique.

Regarding claim 2, Merrow, as applied to claim 1, teaches that selecting the contact from a set of contacts within a contact database (col.2, lines 45-49).

Regarding claim 3, Merrow, as applied to claim 1, teaches that classifying the contact as either a person or not a person and terminating the call, if the contact is not a person (abstract; col.2, line 50-col.3, line 40).

Regarding claims 4, 25, Merrow, as applied to claims 1 and 24, teaches that selecting the dialog from a set of dialogs stored in a dialog database based upon a set of attributes associated with the contact (abstract; col.2, line 50-col.3, line 40).

Regarding claims 5, 18, 22, Merrow teaches storing contact attributes in a contact database (col.2, lines 45-49). However, Merrow in view of Lau further does not specifically teach storing the contact's vocal responses, textual words in a contact database and providing includes, providing the operator with access to the contact database. Parolkar teaches storing the

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contact's vocal responses, textual words in a contact database and providing includes, providing the operator with access to the contact database (col.3, lines 17-27, 61-67, col.4, lines 1-3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow in view of Lau to incorporate the feature of storing the contact's vocal responses, textual words in a contact database and providing includes, providing the operator with access to the contact database in Merrow's invention in view of Lau's invention as taught by Parolkar. The motivation for the modification is to do so in order to send text responses to an agent such that the agent can communicate with the user using text messaging technique.

Regarding claim 6, Merrow further does not specifically teach continuing a next portion of the out-calling dialog with the contact while waiting for the human operator to become available. Lau teaches continuing a next portion of the out-calling dialog with the contact while waiting for the human operator to become available (col.6, lines 15-28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of continuing a next portion of the out-calling dialog with the contact while waiting for the human operator to become available in Merrow's invention as taught by Lau. The motivation for the modification is to do so in order to connect a user to a live operator in case of the operator's availability.

Regarding claims 7, 23, Merrow further does not specifically teach determining whether the contact is interested in the out-calling dialog and wherein connecting includes, connecting the contact to the operator, if the contact is interested. Lau teaches determining whether the contact



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is interested in the out-calling dialog and wherein connecting includes, connecting the contact to the operator, if the contact is interested (fig.4a; col.6, lines 15-28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of determining whether the contact is interested in the out-calling dialog and wherein connecting includes, connecting the contact to the operator, if the contact is interested in Merrow's invention as taught by Lau. The motivation for the modification is to do so in order to connect a user to a live operator at the use's own choice.

Regarding claim 8, Merrow further does not specifically teach applying a set of heuristics to the textual words. Lau teaches applying a set of heuristics to the textual words (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of applying a set of heuristics to the textual words in Merrow's invention as taught by Lau. The motivation for the modification is to do so in order to verify the utterance of a user.

Regarding claim 9, Merrow further does not specifically teach matching the textual words with predetermined keywords associated with interest. Lau teaches matching the textual words with predetermined keywords associated with interest (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of matching the textual words with predetermined keywords associated with interest in Merrow's invention as taught by Lau. The

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motivation for the modification is to do so in order to verify the utterance of a user such that correct responses can be achieved for interest.

Regarding claim 10, Merrow further does not specifically teach matching the textual words with predetermined keywords associated with disinterest. Lau teaches matching the textual words with predetermined keywords associated with disinterest (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of matching the textual words with predetermined keywords associated with disinterest in Merrow's invention as taught by Lau. The motivation for the modification is to do so in order to verify the utterance of a user such that correct responses can be achieved for disinterest.

Regarding claim 11, Merrow further does not specifically teach applying a set of heuristics to the textual words and concluding that the contact is interested if a greater number of the heuristics within the set of heuristics indicate the contact's interest. Lau teaches applying a set of heuristics to the textual words and concluding that the contact is interested if a greater number of the heuristics within the set of heuristics indicate the contact's interest (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of applying a set of heuristics to the textual words and concluding that the contact is interested if a greater number of the heuristics within the set of heuristics indicate the contact's interest in Merrow's invention as

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taught by Lau. The motivation for the modification is to do so in order to verify the utterance of a user such that the closest correct responses can be achieved for interest.

Regarding claim 13, Merrow further teaches terminating the call with the contact, if the contact is not interested (abstract; col.2, line 50-col.3, line 40).

Regarding claim 14, Merrow further does not specifically teach performing the translating and determining elements in parallel. Lau teaches performing the translating and determining elements in parallel (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of performing the translating and determining elements in parallel in Merrow's invention as taught by Lau. The motivation for the modification is to do so in order to convert the utterance of a user such that the system can decide the interest of the user based on the closest correct responses.

Regarding claim 15, Merrow further does not specifically teach performing the determining element after the predetermined portion of the out-calling dialog with the contact is completed. Lau teaches performing the determining element after the predetermined portion of the out-calling dialog with the contact is completed (fig.4a; col.5, line 66-col.6, line 28). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow to incorporate the feature of performing the determining element after the predetermined portion of the out-calling dialog with the contact is completed in Merrow's

invention as taught by Lau. The motivation for the modification is to do so in order to decide the interest of a user as quickly as possible without making any significant delay.

Claims 16 and 24 are rejected for the same reasons as discussed above with respect to claims 1, 5 and 7. Furthermore, Merrow further teaches terminating the call with the contact, if the contact is not interested (abstract; col.2, line 50-col.3, line 40).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrow et al. (U.S. Patent No. 6,990,179) in view of Lau et al. (U.S. Patent No. 6,850,766) further in view of Parolkar et al. (U.S. Patent No. 7,366,285) further in view of Kanevsky et al. (U.S. Patent No. 5,774,525).

Claim 12 is rejected for the same reasons as discussed above with respect to claim 11. Furthermore, Merrow in view of Lau further in view of Parolkar does not specifically teach associating a score with each heuristic, totaling the scores and concluding that the contact is interested if the total score is above a predetermined threshold. Kanevsky teaches associating a score with each heuristic, totaling the scores and concluding that the contact is interested if the total score is above a predetermined threshold (col.4, lines 39-58, col.5, lines 46-55). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Merrow in view of Lau further in view of Parolkar to incorporate the feature of associating a score with each heuristic, totaling the scores and concluding that the contact is interested if the total score is above a predetermined threshold in Merrow's invention in view of

Lau's invention further in view of Parolkar's invention as taught by Kanevsky. The motivation for the modification is to do so in order to accurately decide the interest of a user.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MD S. ELAHEE whose telephone number is (571)272-7536. The examiner can normally be reached on Mon to Fri from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner  
Art Unit 2614  
March 10, 2009